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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,810	09/10/2003	Taro Terao	117127	2878
25944 7590 02/06/2008 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
			EXAMINER FEARER, MARK D	
			ART UNIT 2143	PAPER NUMBER
			MAIL DATE 02/06/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/658,810

Applicant(s)

TERAO, TARO

Examiner

Mark D. Fearer

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- Previous finality is withdrawn.
- Applicant's Amendment filed 16 January 2008 is acknowledged.
- Claims 3-14 are pending in the present application.
- This action is made **FINAL**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3-6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 20020052884 A1) in view of Laborde et al. (US 20030105811 A1).

Consider claim 3. Farber et al. discloses a computer system comprising a holding unit for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values respectively (Farber et al., paragraphs 0053-0055); a providing unit for accepting a received characteristic value as an information request for a piece of data as a processing object from a requester and selecting the piece of data associated with the received characteristic value from the pieces of data held by the holding unit to provide the piece of data to the requester (Farber et al., paragraph 0196); and an operation unit for calculating a characteristic value based on a piece of data as a processing object, wherein the operation unit divides the piece of data into a sequence of data fragments each having a predetermined size (Farber et al., paragraph 0152). However, Farber et al. fails to disclose a method of calculating second characteristic values based on the data fragments. Laborde et al. discloses a method for making technical data available across an enterprise which may contain multiple data stores wherein one or more attribute values may be stored in a second data store, wherein the first data store is a different type of data store than the second data store (Laborde et al., paragraphs 0167-0169).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate a method for making technical data

available across an enterprise which may contain multiple data stores wherein one or more attribute values may be stored in a second data store, wherein the first data store is a different type of data store than the second data store as taught by Laborde et al. with a computer system comprising a holding unit for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values respectively; a providing unit for accepting a received characteristic value as an information request for a piece of data as a processing object from a requester and selecting the piece of data associated with the received characteristic value from the pieces of data held by the holding unit to provide the piece of data to the requester; and an operation unit for calculating a characteristic value based on a piece of data as a processing object, wherein the operation unit divides the piece of data into a sequence of data fragments each having a predetermined size as taught by Farber et al. for the purpose of association in semi structured objects.

Consider claim 4, as applied to claim 3. Farber et al., as modified by Laborde et al., further discloses a computer system wherein the operation unit calculates the characteristic value based on the sequence of characteristic values by a repetitive operation for respective characteristic values contained in the sequence of characteristic values at a time of calculation of the characteristic value based on the sequence of characteristic values; and when the sequence of characteristic values comprises N characteristic values, the operation unit holds a result of the repetitive operation for one to N-1 characteristic values in the holding unit (Farber et al.,

paragraph 0188).

Consider claim 5. Farber et al., as modified by Laborde et al., further discloses a computer system comprising: a holding unit for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values respectively (Farber et al., paragraphs 0053-0055); a providing unit for accepting a received characteristic value as an information request for a piece of data as a processing object from a requester and selecting the piece of data associated with the received characteristic value from the pieces of data held by the holding unit to provide the piece of data to the requester (Farber et al., paragraph 0196); an operation unit for calculating a characteristic value based on a piece of data as a processing object, wherein the operation unit divides the piece of data into a sequence of data fragments each having a predetermined size (Farber et al., paragraph 0152), calculates second characteristic values based on the data fragments respectively, compares a size of each of the second characteristic values with the predetermined size, holds a data fragment per-se without an associated second characteristic value in the holding unit when the predetermined size is smaller than the size of the associated second characteristic value but holds the data fragment and the associated second characteristic value associatively in the holding unit when the predetermined size is larger than the size of the associated second characteristic value (Farber et al., 0167-0169), generates a second characteristic value-containing sequence corresponding to the sequence of data fragments, calculates a-the characteristic value based on the second characteristic

value-containing sequence, and holds the second characteristic value-containing sequence and the characteristic value in the holding unit while associating the second characteristic value-containing sequence with the characteristic value (Laborde et al., paragraphs 0167-0169).

Consider claim 6. Farber et al., as modified by Laborde et al., further discloses a computer system comprising: a holding unit for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values respectively (Farber et al., paragraphs 0053-0055); and a providing unit for accepting a received characteristic value as an information request for a piece of data as a processing object from a requester and selecting the piece of data associated with the received characteristic value from the pieces of data held by the holding unit to provide the piece of data to the requester (Farber et al., paragraph 0196); wherein the holding unit holds a characteristic value calculated based on the second characteristic value set containing at least one second characteristic value; and the providing unit provides respective second characteristic values contained in the second characteristic value set to the requester when a-the received characteristic value accepted as requesting an information request for a piece of data as a processing object is associated with the second characteristic value set (Laborde et al., paragraphs 0167-0169).

Consider claim 9. Farber et al., as modified by Laborde et al., further discloses an information processing method, comprising: holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while

associating the pieces of data with the first characteristic values respectively (Farber et al., paragraphs 0053-0055); and accepting a received characteristic value as an information request for a piece of data as a processing object from a requester and selecting the piece of data associated with the received characteristic value from the pieces of data to provide the piece of data to the requester, wherein: a characteristic value is calculated based on a piece of data as a processing object (Farber et al., paragraph 0196), the piece of data is divided into a sequence of data fragments each having a predetermined size (Farber et al., paragraph 0152), second characteristic values are calculated based on the data fragments respectively, the data fragments and the second characteristic values are held while associating the data fragments with the second characteristic values respectively, a sequence of second characteristic values corresponding to the sequence of data fragments is generated, the sequence of second characteristic values is held and the characteristic value is calculated based on the sequence of second characteristic values while associating the sequence of second characteristic values with the characteristic value (Laborde et al., paragraphs 0167-0169).

Consider claim 10. Farber et al., as modified by Laborde et al., further discloses a computer-readable storage medium including a program executed by a computer system, the program comprising: a procedure for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values respectively (Farber et al., paragraphs 0053-0055); and a procedure for accepting a received characteristic

value as an information for a piece of data as a processing object from a requester and selecting the piece of data associated with the received characteristic value from the pieces of data to provide the piece of data to the requester, wherein: a characteristic value is calculated based on a piece of data as a processing object (Farber et al., paragraph 0196), the piece of data is divided into a sequence of data fragments each having a predetermined size (Farber et al., paragraph 0152), second characteristic values are calculated based on the data fragments respectively, the data fragments and the second characteristic values are held while associating the data fragments with the second characteristic values respectively, a sequence of second characteristic values corresponding to the sequence of data fragments is generated, the sequence of second characteristic values is held and the characteristic value is calculated based on the sequence of second characteristic values while associating the sequence of second characteristic values with the characteristic value (Laborde et al., paragraphs 0167-0169).

Claims 7-8 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (US 20020052884 A1) in view of Laborde et al. (US 20030105811 A1) and in further view of Burgess (US 7284243 B2).

Consider claim 7, as applied to claim 3. Farber et al., as modified by Laborde et al., discloses a method of association in semi structured objects comprising a holding unit for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values and second characteristic values calculated based on the pieces of

data while associating the pieces of data with the second characteristic values.

However, Farber et al., as modified by Laborde et al., fails to disclose a holding unit holds information for specifying a characteristic value calculation method in association with the characteristic value. Burgess discloses a computer file naming technique employs content-specific filenames (CSFN's) that represent globally-unique identifiers for the contents of a file, wherein a holding unit holds information for specifying a characteristic value calculation method in association with the characteristic value (Burgess, column 2 lines 1-14).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate a computer file naming technique employs content-specific filenames that represent globally-unique identifiers for the contents of a file, wherein a holding unit holds information for specifying a characteristic value calculation method in association with the characteristic value as taught by Burgess with a method of association in semi structured objects comprising a holding unit for holding pieces of data as processing objects and first characteristic values calculated based on the pieces of data while associating the pieces of data with the first characteristic values and second characteristic values calculated based on the pieces of data while associating the pieces of data with the second characteristic values as taught by Farber et al., as modified by Laborde et al., for the purpose of association in semi structured objects.

Consider claim 8, as applied to claim 3. Farber et al., as modified by Laborde et al. and Burgess, further discloses a computer system wherein the holding unit holds a

characteristic value containing information concerning a predetermined calculation state at a point of time of calculation of the characteristic value (Burgess, column 8 lines 16-29).

Consider claim 11, as applied to claim 9. Farber et al., as modified by Laborde et al. and Burgess, further discloses an information processing method comprising holding information for specifying a characteristic value calculation method in association with the characteristic value (Burgess, column 2 lines 1-14).

Consider claim 12, as applied to claim 9. Farber et al., as modified by Laborde et al. and Burgess, further discloses an information processing method comprising holding a characteristic value containing information concerning a predetermined calculation state at a point of time of calculation of the characteristic value (Burgess, column 8 lines 16-29).

Consider claim 13, as applied to claim 10. Farber et al., as modified by Laborde et al. and Burgess, further discloses a computer-readable storage medium comprising: a procedure for holding information for specifying a characteristic value calculation method in association with the characteristic value (Burgess, column 2 lines 1-14).

Consider claim 14, as applied to claim 10. Farber et al., as modified by Laborde et al. and Burgess, further discloses a computer-readable storage medium comprising: a procedure for holding a characteristic value containing information concerning a predetermined calculation state at a point of time of calculation of the characteristic value (Burgess, column 8 lines 16-29).

Response to Arguments

Applicant's arguments filed 16 January 2008 with respect to claims 3-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

'Fast Mining of Frequent Tree Structures by Hashing and Indexing', Department of Informatics, Aristotle University, Thessaloniki 54124, Greece, January, 2003

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any response to this Office Action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents
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Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Mark Fearer whose telephone number is (571) 270-1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Mark Fearer
M.D.F./mdf
February 4, 2008

